

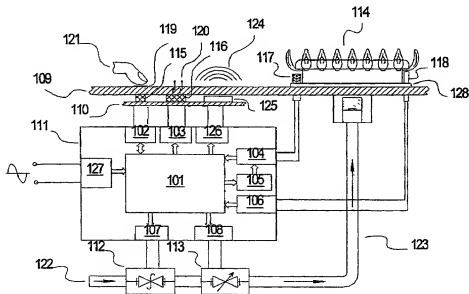
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(54) Title: ELECTRONIC GAS COOKTOP CONTROL WITH SIMMER SYSTEM AND METHOD THEREOF



(57) Abstract: An electronically activated gas cooktop control system, responsive to a touch-sensitive user interface, and capable of providing a predetermined range of cooking and simmer levels of BTU output, has two complementary heating modes of operation. A first heating mode of operation is provided to produce a wide selection of simmer levels of BTU output, by electronically sequencing a solenoid-operated modulating gas valve "on" and "off", at a predetermined level of flame. A second cooking mode of operation is provided by electronically modulating the level of flame, through use of a pulse-width-modulation (PWM) output signal to produce a wide selection of cooking levels of BTU output. An igniter system capable of insuring proper ignition of gas without generating harmful electromagnetic interference is also provided.

WO 01/29483 A1